AMENDMENT NO. 1

TO THE

FULLY REIMBURSABLE SPACE ACT AGREEMENT

BETWEEN

THE BOEING COMPANY

AND

NASA

FOR

CONJUNCTION ASSESMENT RISK ANALYSIS (CARA) SUPPORT

The following articles of SAA5-13-2-R14322 are amended as shown; 2, 5, 19 and 25. All other articles remain as in the original Agreement.

ARTICLE 2. PURPOSE OF AMENDMENT

SAA5-13-2-R14322 is amended by inserting additional information into the language of Article 2, PURPOSE OF AMENDMENT:

CARA support can be provided to the Partner either as a one-time service to cover a spacecraft ascent to mission orbit over a short (~1-2 month) timeframe, or CARA can provide long-term support on a month-to-month basis to cover long-term mission events such as ascent to orbit using electric propulsion or routine on-orbit support throughout the mission lifetime. Both support options use the same interfaces and produce the same products; only the timeframe varies.

ARTICLE 5. FINANCIAL OBLIGATIONS

SAA5-13-2-R14322 is amended by substituting the following language in Article 5, FINANCIAL OBLIGATIONS:

1. Partner agrees to reimburse NASA an estimated cost of \$10,000 per mission for NASA to carry out its responsibilities under this Agreement for short term (duration not to exceed 2 months) support or \$6000 per month for each month of conjunction assessment support for long term (more than two months) support of any spacecraft. NASA will not initiate work under this Agreement until NASA has received Partner's payment(s) for that work. In no event will NASA transfer any U.S. Government funds to Partner under this Agreement. Payment must be made by Partner in advance of initiation of NASA's efforts. Advance payments shall be scheduled to ensure that funds are resident with NASA before Federal obligations are incurred in support of this Agreement.

ARTICLE 19. POINTS OF CONTACT

SAA5-13-2-R14322 is amended by substituting the following language in Article 19, POINTS OF CONTACT:

The following personnel are designated as the Points of Contact between the Parties in the performance of this Agreement.

NASA Goddard Space Flight Center

Lauri K. Newman

Engineer (AST, NAV GUID &

CONTROL SYS)

Mail Stop: 595

8800 Greenbelt Road

Greenbelt, MD 20771

Phone: 301-286-3155

lauri.k.newman@nasa.gov

The Boeing Company

Steven A. Cezus

Astrodynamics Manager

1920 E. Walnut Ave

Bldg. S23

El Segundo, CA 90245

Phone: 562-797-0652

steven.a.cezus@boeing.com

ARTICLE 25. SIGNATORY AUTHORITY

The terms and conditions of SAA5-13-2-R14322, as modified by this Amendment are hereby incorporated herein.

NATIONAL AERONAUTICS AND

SPACE ADMINISTRATION GODDARD SPACE FLIGHT

CENTER

Dennis J. Androg

Director, Applied Engineering and

Technology Directorate

THE BOEING COMPANY

Chris O Dietrick, Digitally signed by Chris O Dietrick, 2033573

Dischards being, our-boeing Secure Messaging ConeChris O Dietrick, 2033573, email-chris o dietrick phoseing.com place 2013:03.03.03.1314:13-0800

BY:

Chris O. Dietrick

Procurement Agent

03/05/2015